

**COLORADO RIVER RECOVERY PROGRAM  
FY 2001 PROPOSED SCOPE-OF-WORK**

Project No. 29  
UMBRELLA: Operation and Maintenance

Lead Agency: U.S. Fish and Wildlife Service

Category (Check one)

Submitted by: Thomas E. Czapla

☒ Ongoing Project  
☐ Ongoing-Revised  
☐ Requested New Start

Address: Colorado River Recovery Program  
U.S. Fish and Wildlife Service  
P.O. Box 25486, Denver Federal Ctr.  
Denver, Colorado 80225

Telephone: (303) 236-2985x228

FAX: (303) 236-0027

E-Mail: tom\_czapla@mail.fws.gov

Principal Investigators: Tom Pruitt  
Ouray National Fish Hatchery  
U.S. Fish and Wildlife Service  
266 West 100 North, #2  
Vernal, Utah 84078

Telephone: (435) 789-4078

FAX: (435) 789-4805

Mike Baker  
Grand Valley Endangered Fish Facility  
U.S. Fish and Wildlife Service  
764 Horizon Drive, South Annex A  
Grand Junction, Colorado 81506-3946

Telephone: (970) 245-9319

FAX: (970) 245-6933

Wayne Gustaveson  
Wahweap State Fish Hatchery  
Utah Division of Wildlife Resources  
336 Birch Street  
Page, Arizona 86040

Telephone: (520) 645-2392

FAX: (520) 645-6824

Date: May 22, 2000 (**Revised June 12, 2000**)

I. Title of Proposal: Operation and Maintenance of Propagation Facilities for Captive-Rearing of Endangered Colorado River Fishes (Umbrella Scope-of-Work)

II. Relationship of Recovery Program/Ranking Factors:

IV. Manage genetic integrity and augment or restore populations

IV.A. Genetic management

IV.A.1 Augment razorback sucker

IV.A.4 Secure and manage genetic stocks in refugia

IV.C. Operate and maintain facilities

- IV.C.1. Ouray
- IV.C.2. Horsethief
- IV.C.4. Wahweap

### III. Study Background/Rationale, and Hypotheses

This project is directly related to Section 2.4 IV. "Conserve Genetic Integrity and Augment or Restore Populations" in the Recovery Implementation Program - Recovery Action Plan (U.S. Fish and Wildlife Service 1993). One of five elements in the Recovery Implementation Program for Endangered Fishes in the Upper Colorado River Basin is "native fish stocking" (U.S. Fish and Wildlife Service 1987). The goal of this element is to produce sufficient captive-reared endangered fishes for conducting laboratory and field research and to develop broodstocks with genetic diversity similar to the wild stock used as founders (Williamson and Wydoski 1994). The need for captive-reared endangered fish and propagation facilities is identified in Wydoski (1994).

### IV. Goals, Objectives, End Product:

Goal: To operate a genetically sound captive propagation program for high priority endangered fish species for the RIP in the Upper Colorado River Basin in accordance with the Annual Propagation Operation Plan.

Objective: Operate and maintain propagation facilities that are needed to hold, rear, or produce captive-reared endangered fishes for the RIP in the Upper Colorado River Basin in accordance with the Annual Propagation Operation Plan.

End Product: Maintenance of endangered fish in refugia to prevent extinction; development of genetically sound broodstocks for stocking to stabilize or enhance wild stocks; production of captive-reared endangered fish for priority laboratory and field experiments.

### V. Description of Past Performance on This or Similar Projects:

Fishery biologists have cultured and reared endangered fishes in the upper basin since 1987. This experience and a close liaison with culturists at the Dexter National Fish Hatchery and Technology Center NM provide all of the knowledge, skills, and abilities that are available for culturing the endangered Colorado River fishes.

Fish culturists and biologists with the Colorado Division of Wildlife, Utah Division of Wildlife Resources, and the U.S. Fish and Wildlife Service have successful experience in the culture of razorback suckers, bonytail, and Colorado squawfish at a number of different sites.

### VI. Study Area: The Upper Colorado River Basin in the States of Colorado, Utah, and Wyoming, excluding the San Juan River drainage. Recovery Program propagation facilities in Colorado and Utah.

### VII. Methods/Approach:

Conduct all tasks associated with the operation and maintenance of propagation facilities for endangered fishes such as pond culture, marking fish, maintaining records of pedigreed family lots, etc.

Facility

Grand Valley End. Fish Facility CO	U.S. Fish and Wildlife Service
Ouray National Fish Hatchery UT	U.S. Fish and Wildlife Service
Wahweap State Fish Hatchery UT	Utah Div. of Wildlife Resources

VIII. Task Description and Schedule:

Develop and implement the Annual Propagation Facilities Operation Plan. Target Date: January 1, 2000.

Continuous ongoing activities associated with propagation of endangered Colorado River fishes at the locations identified above. October 1, 1999 - September 30, 2000.

Production of broodstocks in refugia with genetic diversity similar to wild stocks used as founders. Present focus on razorback sucker broodstocks from the Middle Green River and Upper Colorado River. Target Date for Spawning: April-May, 2000. Target Date for Rearing in Hatcheries: April through September, 2000. Ongoing in out-years.

Production of captive-reared endangered fish for field and laboratory research, information and education programs, and augmentation or restoration stocking. Target Date: As specified in Annual Propagation Operation Plan.

Annual report of endangered fish in captivity by species, stock, RIP purpose, and mortalities during the each quarter for each facility holding endangered fish. Target Date: September 30, 2000.

IX. FY 2000 Work (Costs are in \$1,000's):

Operation and maintenance costs for each facility involve salaries, benefits, equipment, chemicals, fish food, vehicles, utilities, etc.

Fiscal Year 2000

**Task 1 -Grand Valley Endangered Fish Facility CO** \$ 300.0

Salaries	\$ 211.0
Food	\$ 25.0
Chemicals/fertilizer	\$ 10.0
Vehicle	\$ 12.0
Travel	\$ 4.0
Utilities	\$ 20.0
Supplies/Misc.	\$ 10.0

**Task 2 A. Ouray National Fish Hatchery UT** \$ 300.0\*

Salaries	\$ 261.0	(\$ 380.0)*
Electricity	\$ 30.0	
Propane	\$ 12.0	
Oxygen	\$ 15.0	
Fish Food	\$ 30.0	
Chemicals	\$ 5.0	
Travel & Training	\$ 8.0	
Vehicle	\$ 9.0	

Supplies	\$ 7.0
Miscellaneous	\$ 3.0

\* The U.S. Fish and Wildlife Service will furnish \$300.0K from appropriated funds in FY 2001. The Management Committee realizes this is underfunded if Ouray NFH is fully operational.

Task 2 **B. Ouray National Fish Hatchery Well Maintenance** \$ 40.0  
 Bureau of Reclamation's Well-Team to maintain and service wells including replacing pumps, jet cleaning wells and developing new wells on an annual basis.  
 Estimate \$ 40.0

Task 3 - **Wahweap State Fish Hatchery UT (#29c)** \$ 160.4

Salaries	\$ 111.7
Utilities	\$ 41.0
Equipment	\$ 5.5
Travel	\$ 2.2

FY-01 Work

Task 1. Grand Valley	\$ 300,000
Task 2. Ouray NFH	\$ 380,000
Well Team	\$ 40,000
Task 3. Wahweap SFH	<u>\$ 160,400</u>
Total	\$ 870,400

FY-02 Work

Task 1. Grand Valley	\$ 320,000
Task 2. Ouray NFH	\$ 400,000
Well Team	\$ 40,000
Task 3. Wahweap SFH	\$ 176,400
Task 4. CDOW, Alamosa	<u>\$ 50,000</u>
Total	\$ 986,400

FY-03 Work

Task 1. Grand Valley	\$ 340,000
Task 2. Ouray NFH	\$ 420,000
Well Team	\$ 40,000
Task 3. Wahweap SFH	\$ 193,800
Task 4. CDOW, Alamosa	<u>\$ 70,000</u>
Total	\$1,063,800

IX. Budget Summary:

	Proposed Program Funds	FWS	Total
FY-2001	\$ 590,400	\$ 300,000	\$ 890,400
FY-2002	\$ 676,400	\$ 310,000	\$ 986,400
FY-2003	\$ 743,800	\$ 320,000	\$ 1,063,800

X. Reviewers

Various Service and Recovery Program staff.

XI. References

U.S. Fish and Wildlife Service. 1987. Recovery implementation program for endangered fish species in the Upper Colorado River Basin. U.S. Department of the Interior, Fish and Wildlife Service, Region 6, Denver, Colorado. 6 Sections. Various pagination.

U.S. Fish and Wildlife Service. 1996. Section 7 consultation, sufficient progress, and historic projects agreement and recovery action plan. U.S. Department of the Interior, Fish and Wildlife Service, Region 6, Denver, Colorado. 52 pp. + Appendix A.

Williamson, J.H. and R.S. Wydoski. 1994. Genetics management guidelines. Recovery Implementation Program for Endangered Fishes in the Upper Colorado River Basin. U.S. Department of the Interior, Fish and Wildlife Service, Region 6, Denver, Colorado. 40 pp.

Wydoski, R.S. 1994. Coordinated hatchery facility plan: need for captive-reared endangered fish and propagation facilities. Upper Colorado River Basin, Recovery Implementation Program. U.S. Fish and Wildlife Service, Region 6, Denver, Colorado. 133 pp.